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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/750,823	01/05/2004	Kunihiko Sakurai	2003-1770	4076

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EXAMINER

OJINI, EZIAMARA ANTHONY

ART UNIT	PAPER NUMBER
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3723

DATE MAILED: 05/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/750,823	Applicant(s) SAKURAI ET AL.	
	Examiner Anthony Ojini	Art Unit 3723	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 9-12 is/are rejected.
- 7) ☒ Claim(s) 6-8, 13, 14 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☒ Certified copies of the priority documents have been received in Application No. 09/663,417.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>1/5/04</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-5 and 9-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Shimizu et al.** in view of **Oishi et al.** (5,655,954) and **Perlov et al.** (5,893,795).

With respect to claims 1,2,10, Shimizu et al. disclose a polishing apparatus for polishing comprising at least three load-unloaded stages (21) for placing a wafer cassette which accommodates a plurality of wafers (fig.1); a polishing unit (10) for polishing a plurality of wafers simultaneously (col. 6, lines 46-48), cleaning unit (23a-23c) for cleaning the polished wafer. Shimizu et al. disclose robots (22a, 22b) and the cleaning unit are disposed between the loading-unload stages and the polishing unit (see fig. 1).

Shimizu et al. fail to disclose a robot that moves on rail along the load-unload stages for accessing the respective wafer cassettes. Shimizu et al. also fail to disclose a drying unit.

Oishi et al. disclose a drying unit (25).

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Perlov et al. a robot (72) that moves on track (154) along a load-unload stages for accessing the respective wafer cassettes (see col. 5, lines 13-25 & fig. 3).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide apparatus of Shimizu et al with a drying unit in view of Oishi et al. so as to dry the wafer.

It would further have been obvious to one having ordinary skill in the art at the time the invention was made to provide apparatus of Shimizu et al with a robot that moves along a load-unload stages in view of Perlov et al. so as to access the respective wafer cassettes.

With respect to claim 3, Shimizu et al. disclose a plurality of top rings (13) each for holding the wafer respectively during polishing operation (see fig. 1)

With respect to claim 4, Shimizu et al. disclose a plurality of polishing tables each for providing a polishing surface for the wafer (see fig. 1).

With respect to claim 5, Shimizu et al. disclose a plurality of robots (22a, 22b) for transferring the wafer in a space between the load-unload stages and the polishing unit (see fig. 1).

With respect to claim 9, Shimizu et al. disclose at least three cleaning units (23a, 23b, 23c).

With respect to claims 11,12, Shimizu et al. disclose wherein a partition is provided between the polishing unit, load-unload stages and the cleaning unit (see fig.1).

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Allowable Subject Matter

Claims 6-8,13,14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Somekh, Togawa et al., Yoshida et al. disclose a polishing apparatus respectively.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony Ojini whose telephone number is 703 305 3768. The examiner can normally be reached on 7 to 4 Tuesday-Friday with every other Monday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Hail can be reached on 703 308 2687. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Joseph J. Hail, III
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Technology Center 3700

AO
May 11, 2004